



## Case Study:

### A tale of two patrol boats in Thua Thien Hue Province



#### Overview

In Viet Nam, the Regional Fisheries Livelihoods Programme provided support for the protection of Aquatic Resource Protected Areas, through the design, construction and delivery of two patrol boats in two different communities. The impact of this activity has differed between the communities with one putting the boat to effective use while in the other the boat was all but abandoned. This case study looks at the reasons for this and highlights some lessons learned and recommendations for similar future initiatives.

#### Key lessons learned

- A participatory survey is necessary prior to procuring any patrol boat to identify the role it will play, the ability of the community to operate and maintain it as well as to assess the location in which the boat will operate.
- Management and operation plans for boat use need to be drawn up with communities.
- Use of donated boats needs to be monitored closely to recognise and counter any problems as quickly as possible.
- Once a boat has been provided to community it will be very difficult to retrieve it, even if it is not being used.

## Background

Tam Giang-Cau Hai Lagoon in Thua Thien Hue province, Viet Nam, is the biggest brackish lagoon in Southeast Asia with a length of nearly 70 km and a total area of approximately 22,000 ha. The lagoon is an important ecosystem due to its biological diversity while almost one third of the province's population (300,000 people) depend on its natural resources.

However, the lagoon has been showing increasing environmental degradation and reduced aquatic bio-diversity, due to population pressure, unplanned aquaculture and uncontrolled exploitation of aquatic species using destructive fishing gears including banned forms of electric fishing.

In an effort to address these issues, in December 2012, the Provincial authorities established nine Aquatic Resource Protected Areas (PAs) with the total area of 282.7 ha (equivalent to 1.3% of the lagoon total area). All fishing activities are strictly forbidden in these areas.

The establishment of these community-based PAs has shown some initial results, thanks to the increased awareness related to resource protection among local people and is proven by the recorded restoration of specific species. In order to sustain this positive trend, it has been agreed that more Aquatic Resource Protected Areas should be established in order to achieve the target of 10% of the lagoon being protected.

These Aquatic Resource Protected Areas are expected to help stop the decline in aquatic species catches so that local fishers will benefit from enhanced fisheries through the spill-over of adult fish into areas where fishing is permitted.

In Thua Thien Hue province the management of Aquatic Resource Protected Areas is under the responsibility of Commune Fisheries Associations (FAs). These FAs represent the local community who are the natural custodians of the lagoon. In this manner, the potential conflict between conservation and livelihoods has been effectively reduced. Currently the local FAs have been officially allocated fishing use rights of the area surrounding the Protected Area, where they are permitted to



*A day fishing trip in the lagoon*

continue their fishing livelihood at acceptable levels, while also preserving the spawning and breeding areas within the PA for their own benefits and those of their children in the long term.

The Spanish-funded and FAO executed, Regional Fisheries Livelihood Programme (RFLP) in Viet Nam has provided assistance to these Protected Areas. At the request of the Department of Agriculture and Rural Development two patrol boats were designed, built and handed over to Loc Binh 1 FA which is responsible for Hon Nui Quen Protected Area and Quang Loi FA which is responsible for Vung Me PA on 21 December 2011. The purpose of providing these boats was to enhance the effectiveness of the patrol teams that protect the spawning and breeding areas in their respective communes.

### Patrol boat design and building process

As a result of a bidding process, Phu Binh Company which had a proven track record of boat building was selected for the construction of the two patrol boats. The initial patrol boat design was reviewed by all relevant stakeholders, including the Department of Registration and an independent national consultant supervisor recruited by the RFLP. The required raw materials and equipment were checked carefully before the start of the construction process and all the construction steps were closely monitored. After a testing phase the two patrol boats were issued with a Certificate of Technical Safety by Registration sub-Department No. 13 on 25 November 2011, which certified that the boats were designed and constructed with the correct specifications for use in the lagoon areas as regulated by the Government of Viet Nam under 22TCN – 265 – 2006 and QCVN 25: 2010/BGTVT. The boats additionally also meet the requirements specified in *the final draft of the FAO/ILO/IMO Safety Recommendations for decked fishing vessels of less than 12 metres in length and undecked fishing vessels.*



*The handover ceremony of the two patrol boats*

### Patrol boat use in Loc Binh 1 commune

Loc Binh 1 Commune Fisheries Association was established in 2003 by the FAO Integrated Management of Lagoon Area (IMOLA) Project and originally had 54 members. Currently the FA has 97 members who catch approximately 180 tons of aquatic products per year. In 2010 the FA was officially issued fishing use rights over a water area of 987 ha. In 2011 the FA was also assigned the responsibility to manage Hon Nui Quen Fisheries Protected Area (PFA) covering 40 ha.

In 2011, RFLP, in partnership with Thua Thien Hue Provincial Sub-DECAFIREP, provided the financial and technical assistance for demarcation of the boundary for this PFA. A patrol team was established, composed of committed FA members. Despite the limited personnel and budget, their initial efforts were impressive in combating illegal fishing. Therefore, it was decided that one RFLP supported patrol boat would be donated to this FA.

The boat has proved extremely effective for patrol activities. In 2012, 35 patrol trips were conducted, resulting in the detection of 44 cases of illegal



*Illegal fishing gear burned during ceremony*

fishing. In all, 108 set of box-traps (♁) and two electric fishing gears were confiscated. These illegal fishing gears were destroyed and witnessed by the community during a fisheries festival.

To better utilize the boat, the Commune FA mobilized its own resources to fine-tune the boat design to ensure that it was appropriate for use in the lagoon and for the purpose of patrolling. This local contribution demonstrates community commitment, rather than the common mentality of over-reliance on external (often foreign donor aid) assistance.

*Mr. Nguyen Van Loi, Head of the FA, said that the boat was particularly useful when they needed to mobilize the whole patrol team in combination with the commune police in cases of serious violations. "As the boat is large enough and has a roof, we have better shelter when we go patrolling in rainy weather."*

### Patrol boat use in Quang Loi commune

In contrast, the patrol boat handed over to Ha Cong Commune Fisheries Association has hardly been used at all. One FA member pointed out that the boat design was inappropriate for the lagoon because the draft of the boat was too deep, especially for the Vung Me area as the water level was very shallow, especially during the dry season from May-July. "Even if we decided to sell this boat at a very low price, no one in this area would ever buy it as it would be of no use at all!" claimed the fisher.

Consequently, the donated patrol boat has been of limited use. The FA has tried to maintain the engine by starting and running it occasionally.

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However, although the metal parts are in good condition, the wooden parts of the boat are beginning to show signs of damage. So far, most of the patrol trips carried out by the FA have been done by mobilizing small vessels belonging to FA members. These were more appropriately designed with a shallow draft and therefore more fit for purpose.

### **Solving the unused Quang Loi commune patrol boat**

Numerous meetings have been organized between RFLP Viet Nam, Thua Thien Hue Provincial Project Management Unit (PMU), the Provincial Sub-DECAFIREP and the representative of Quang Loi

commune and FA members to try and agree a workable solution to the problem of the unused Quang Loi commune patrol boat.

A solution agreed by RFLP and the Sub-Department of Capture Fisheries and Resource Protection (Sub-DECAFIREP) has been for Quang Loi commune to swap their patrol boat with a shallower draft boat from Phu Dien commune. The latter FA manages the Doi Choi Protected Area where the lagoon is deeper and this patrol boat could be effectively used there.

The two RFLP boats have been included in the inventory list of patrol boats under the management of the Sub-DECAFIREP. They have developed an overall plan for the usage and maintenance of these two boats along with the other seven boats already in use by DECAFIREP, defining clear roles and responsibilities. This agency plays an active role combating illegal fishing, including patrol boat management and allocation of budget. The boats will be deployed for operation on a needs basis for coordinating activities for all Fisheries Protected Areas in the province. This is a more effective arrangement than leaving a boat unused in one commune, while no boat is available in a commune that needs one.



*The boat had been left unused in this swamp*

## Lessons Learned

- In order to ensure that a boat design is fit for purpose, a comprehensive survey should be done on the needs, and the natural conditions of the area where the boat will be used. During the survey process, the local authorities and communities should be consulted in-depth to ensure that their local knowledge about water depth as well as other concerns are given serious consideration. If such a participatory survey had been done beforehand, the project would have avoided the problem of the unused boat. Also, there was a matter of missed opportunity. If a more suitable boat had been provided, patrols would have been conducted more effectively at Vung Me Fisheries Protected Area in Quang Loi commune.
- Closer monitoring of the boat use should have revealed the problem earlier. It was over six months after the hand-over of the boats that RFLP staff realized that the Quang Loi boat had hardly been used at all. A logbook of the boat operation would have been a good monitoring tool, but it was not emphasized during the hand-over process.
- Experience sharing (either formal or informal) should have been conducted between the two communes before handing over the boats. If they had had the opportunity to exchange lessons learned from using the boats, Quang Loi commune may have learned from Loc Binh of the need to modify the boat and would have been able to operate it productively.
- The construction of the boat should be done in the dry season to reduce the adverse consequences of the monsoon weather conditions. Due to the lengthy process of selecting the boat builder, design and supervisor, the boat building funded by RFLP Viet Nam took place in November, which was the peak monsoon season in Hue city. This was unfavourable for working with timber.



*Local people was preparing for the handover ceremony of the patrol boats*

- If other programmes plan to build patrol boats, they should consider installing higher capacity engines. In the case described above, the patrol boats were fitted with 22 horse power engines. Although these were bigger than most other boats in the lagoon, it was realized later that the main engine should have been bigger than the other boats in operation in the surveillance area.
- Handheld loudspeakers should be provided to patrol teams/boats for communication when necessary.
- Headlights should be installed on patrol boats for night patrols to enhance effectiveness of patrolling activities.
- Trolleys should be also provided to transport patrol boats to a sheltered area for maintenance when they are not in use.

### Recommendations

- Close monitoring of the use of both boats should continue by the the Sub-DECAFIREP to ensure that they are being used effectively. If the boat handed over to patrol boat handed over to Quang Loi Commune remains unused it



*The flag poles marking the zoning of a Fisheries Protected Area in Thua Thien Hue Province*

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#### **About RFLP**

The Regional Fisheries Livelihoods Programme for South and Southeast Asia (RFLP) sets out to strengthen capacity among participating small-scale fishing communities and their supporting institutions in Cambodia, Indonesia, the Philippines, Sri Lanka, Timor-Leste and Viet Nam. The four-year (2009 – 2013) RFLP is funded by the Kingdom of Spain and implemented by the Food and Agriculture Organization of the United Nations (FAO) working in close collaboration with the national authorities responsible for fisheries in participating countries.

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